

Excavation Interface in CRMarchaeo?

Gerald Hiebel, Edeltraud Aspöck, Matthias Kucera

Background: A puzzle in 4D project

digital preservation and reconstruction of an Egyptian palace

Digital long-term preservation of resources from Austrian excavations at Tell el Daba (Egypt) – 50 year

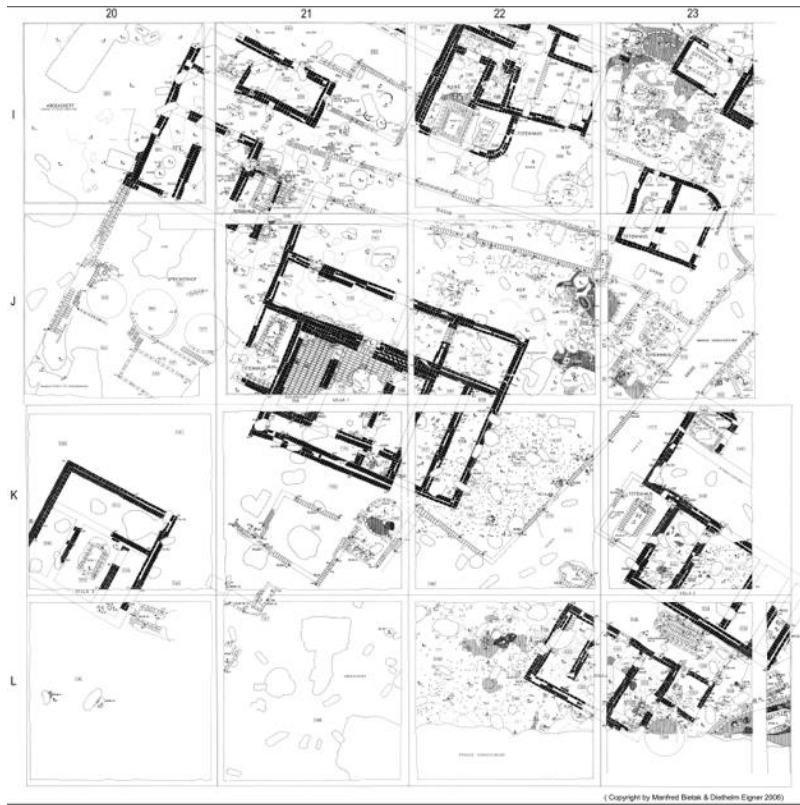
Identification of Stratigraphic Units, 3D reconstruction and development of an archaeological information system

➤ Ludwig Boltzmann Institute ArchPro

Acknowledgements:

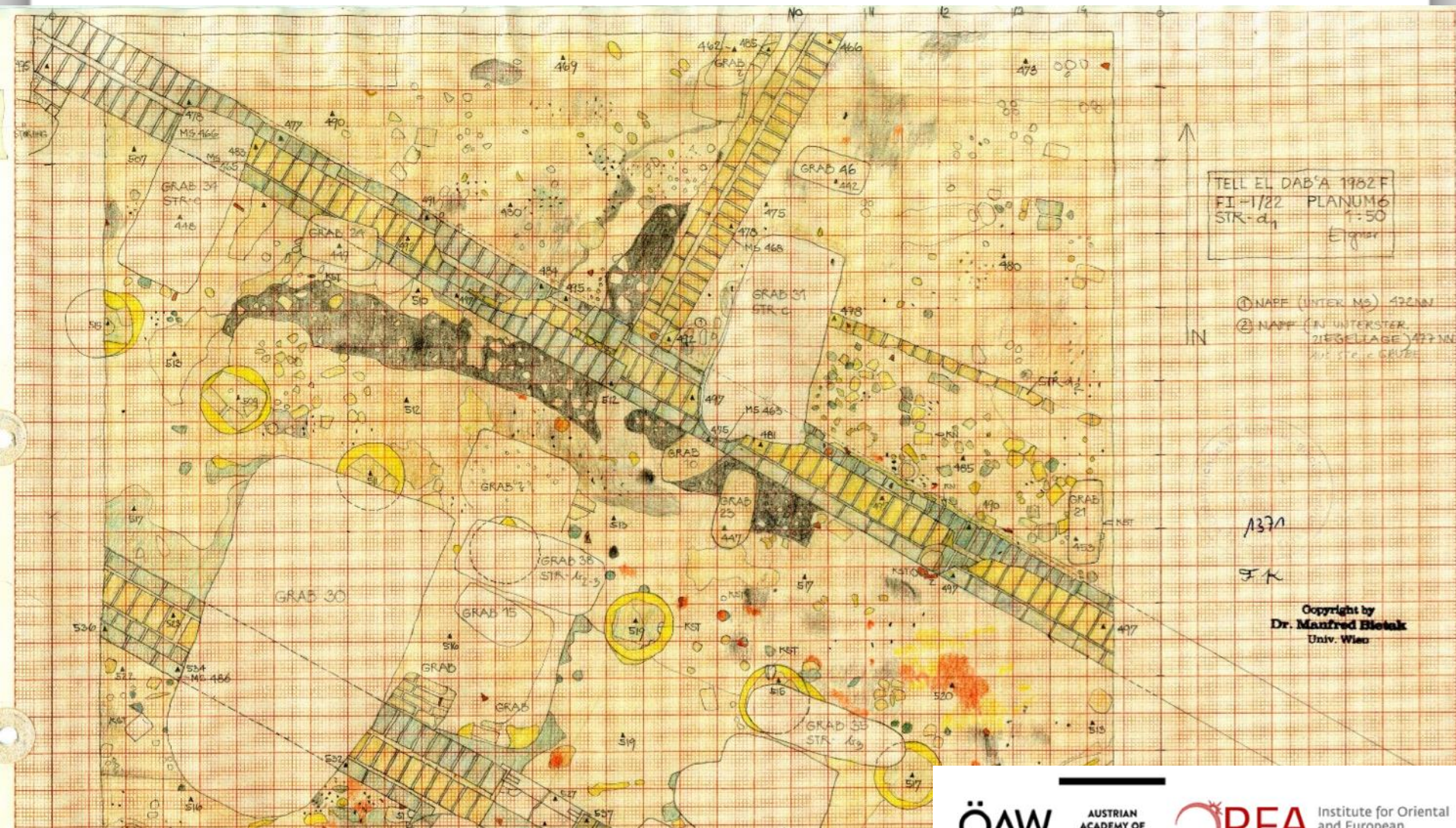
The 'A Puzzle in 4D' project has been made possible through funding from the Nationalstiftung für Forschung, Technologie & Entwicklung (DH 2014/12), ÖAW call: Digital Humanities: Long term projects in cultural heritage).

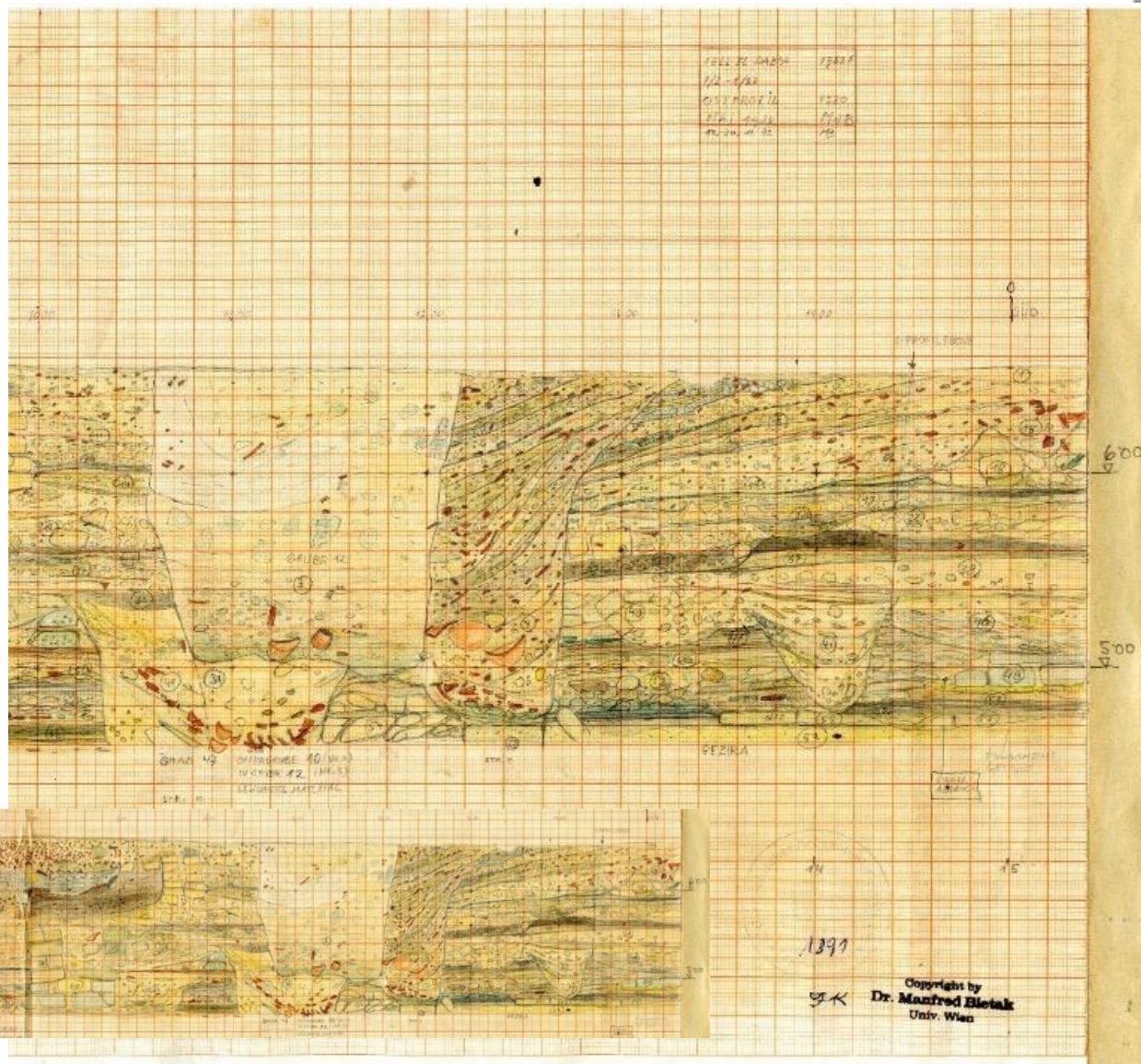
Planquadrate - squares

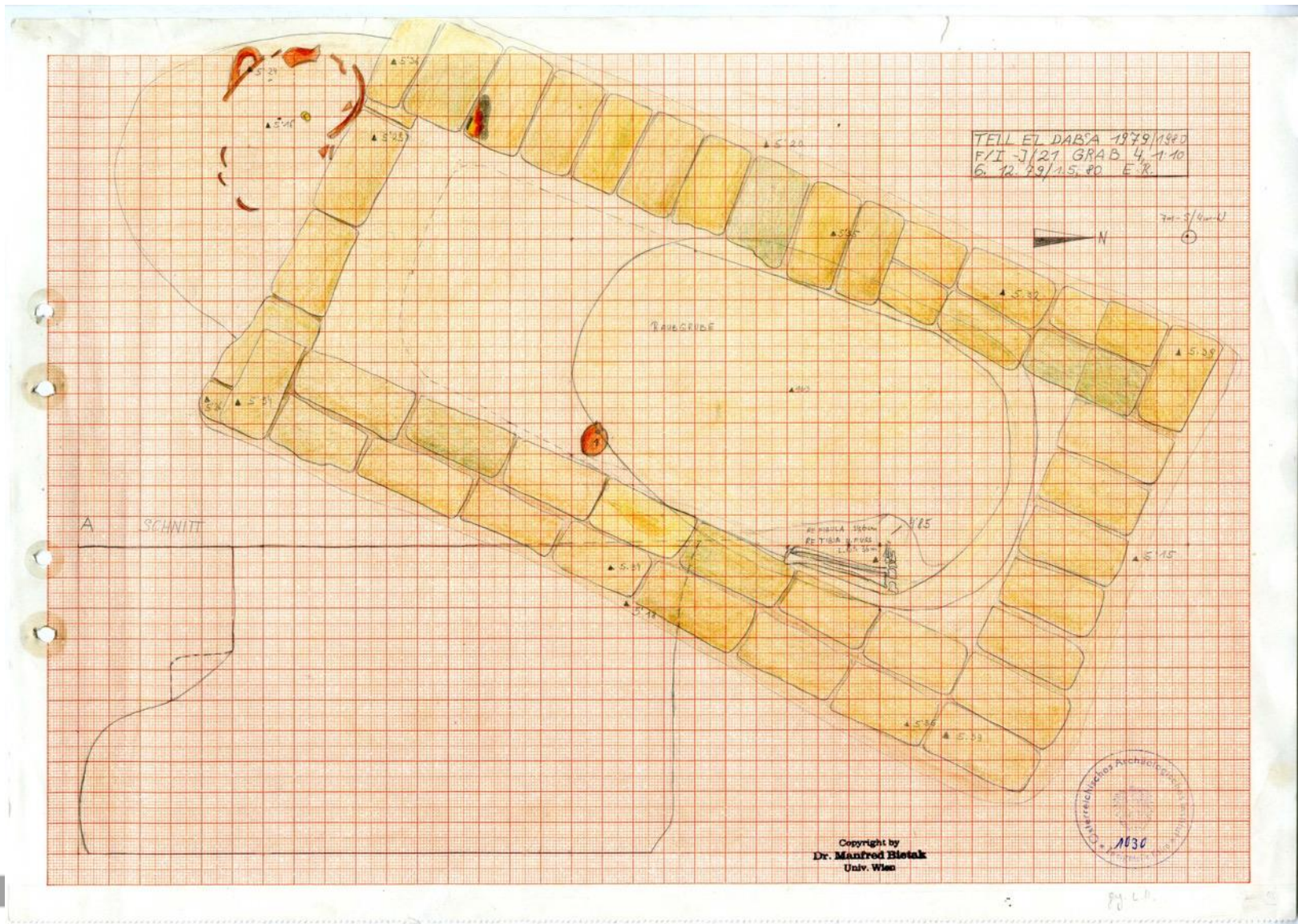


- **Stratum a/1:** graves
- **Stratum a/2:** temple with offering pits (V. Müller 2008), graves
- **Stratum b/1:** settlement with large villae, cemeteries
- **Stratum b/2:** villae, with houses of the dead; Alleyways
- **Stratum b/3:** villae Egyptian style; Graves & cemeteries
- **Stratum c:** Squatter, mass graves
- **Stratum d/1:** palace (=Villa) 2 phases; Wall painting fragments; 2. gardens; Large cemetery (Schiestl 2009)
- **Stratum d/2:** Syrian-style house: oldest building of the first settlers
- **Stratum e:** settlement for workers (Czerny 1999)

MB	v.Chr.	ÄGYPTEN RELATIVE CHRONOLOGIE	TELL EL - DAB ^{CA}					ALLGEMEINE PHASEN	
			STADTZENTRUM (Mittleres Reich) 'Ez. Rushdi	NEUES ZENTRUM MB-Bevölkerung	ÖSTLICHE STADT	NORDÖSTLICHE STADT	PALASTBEZIRK 'Ez. HELMI		
	1410	Dyn.	R / I	F / I	A / I-IV	A / V	H / I-VI		
SB I	1440	AlI	HIATUS			SETH-TEMPEL	Bimsstein c		C / 2
	1470	XVIII H TIII	HIATUS				Fresken d		C / 3
	1500	TII I TI	HIATUS				e / 1		D / 1
	1530	AHMOSE	EROBERUNG VON AVARIS					e / 2 - f	D / 2
MB II C	1560		ABGETRAGEN		D / 2	D / 2			D / 2
	1590	XV HYKSOS	ABGETRAGENE a GRUBEN		D / 3	D / 3	g - h		D / 3
	1620		ABGETRAGENE a GRUBEN		E / 1	E / 1			E / 1
MB II B	1650		ABGETRAGENE a GRUBEN		E / 2	E / 2			E / 2
	1680		ABGETRAGENE a GRUBEN		E / 3				E / 3
	1710	KÖNIG- REICH AVARIS ----- NEHESI	ABGETRAGENE a VORRATS- GRUBEN		F				F
MB II A-B	1740	XIII	ABGETRAGENE a VORRATS- GRUBEN		EPIDEMIE c HIATUS	G / 1-3			G
	1770		ABGETRAGENE a VORRATS- GRUBEN		d / 1	G / 4			G / 4
	1800		ABGETRAGENE a VORRATS- GRUBEN		d / 2	H			H
MB II A	1830	So A IV	b / 1		d / 2a d / 2b				H
	1860	A III	b / 2						I
	1890	XII S II S III	c / 1-2 5tes Jahr S III		HIATUS				K
	1920	A II	e / 1-4				UNBESIEDELT		L
	1950	S I	f						M
	1980	A I	?		e / 1				N
MB I	2000	XI	?		e / 2-3				N / 2-3
	2050	X	?			AUSDEHNUNG DER SIEDLUNG			



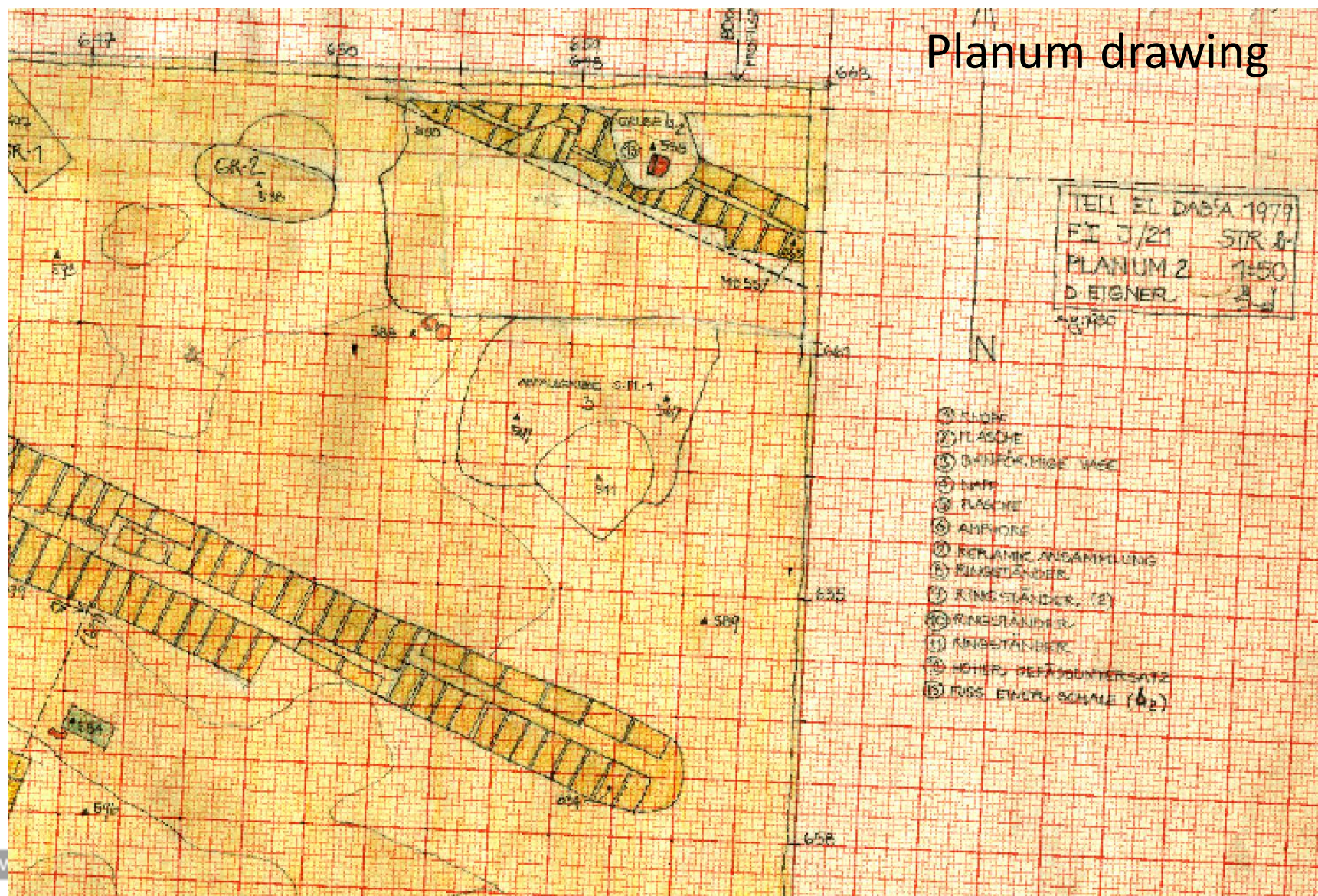




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	1680		b / 2		E / 3				E / 3
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	1980	A I	?						N
MB I	2000	XI	?						N / 2-3
	2050	X	?		AUSDEHNUNG DER SIEDLUNG →				

Identify Stratigraphic Units



Stratigraphic Units - pits (graves)

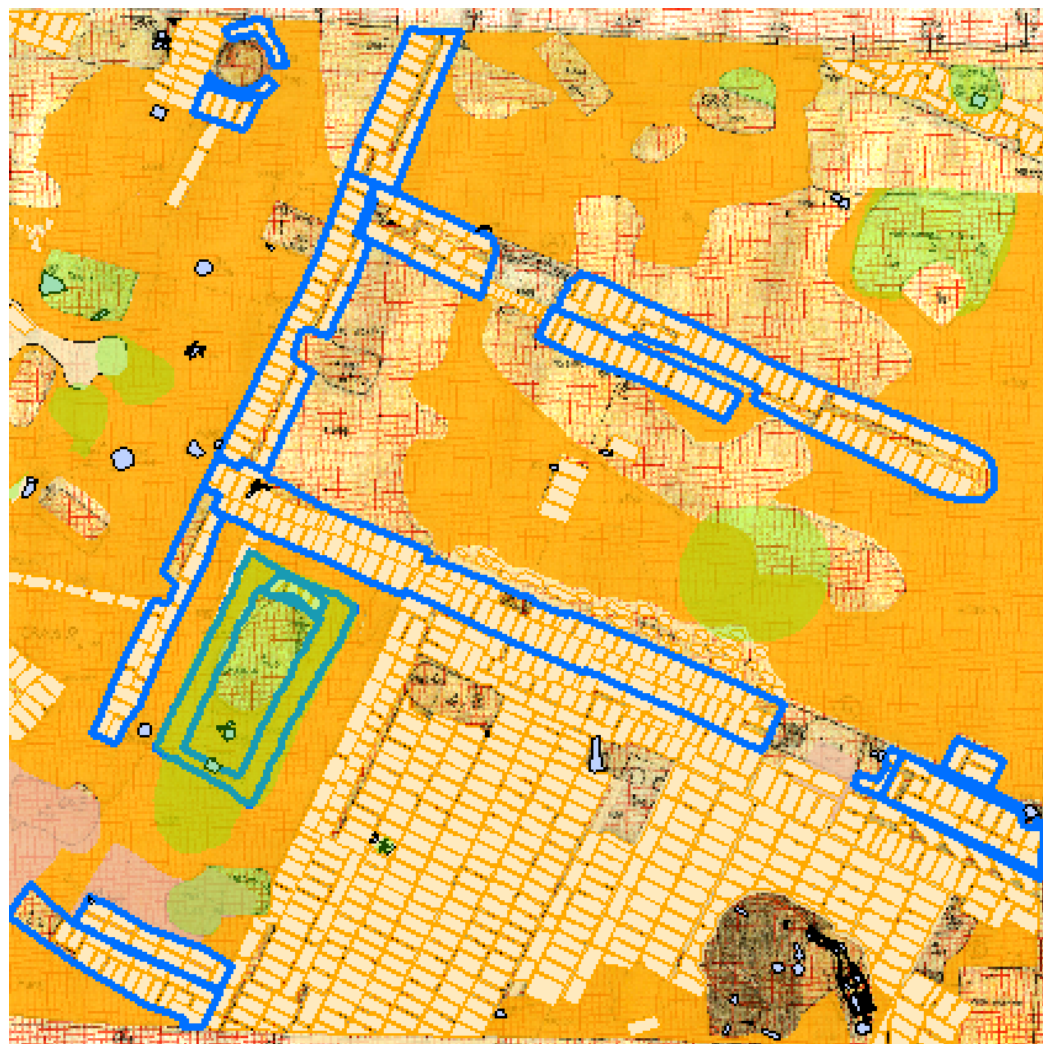




- Asche, Str. b1
- Lehm, Str. b3 früh
- Sand, Str. b2
- Sand, Str. b3
- Sand, Str. b3 früh
- Sand, Str. b3-2
- ⊠ Sandziegel, Str. b1
- ⊠ Sandziegel, Str. b2
- ⊠ Sandziegel, Str. b3-2
- ohne Angabe, Str. b1
- ohne Angabe, Str. b3



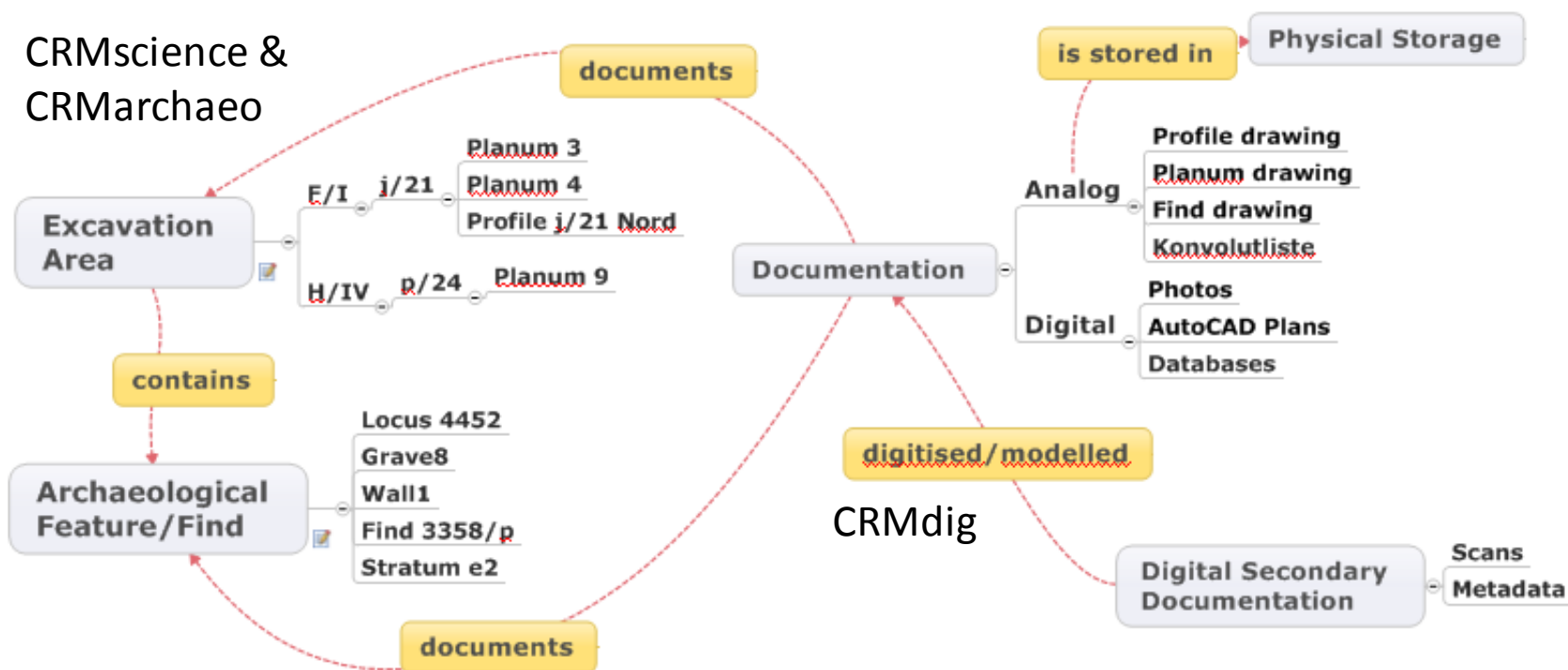
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- Sandziegel, Str. b3-2
- ohne Angabe, Str. b1
- ohne Angabe, Str. b3



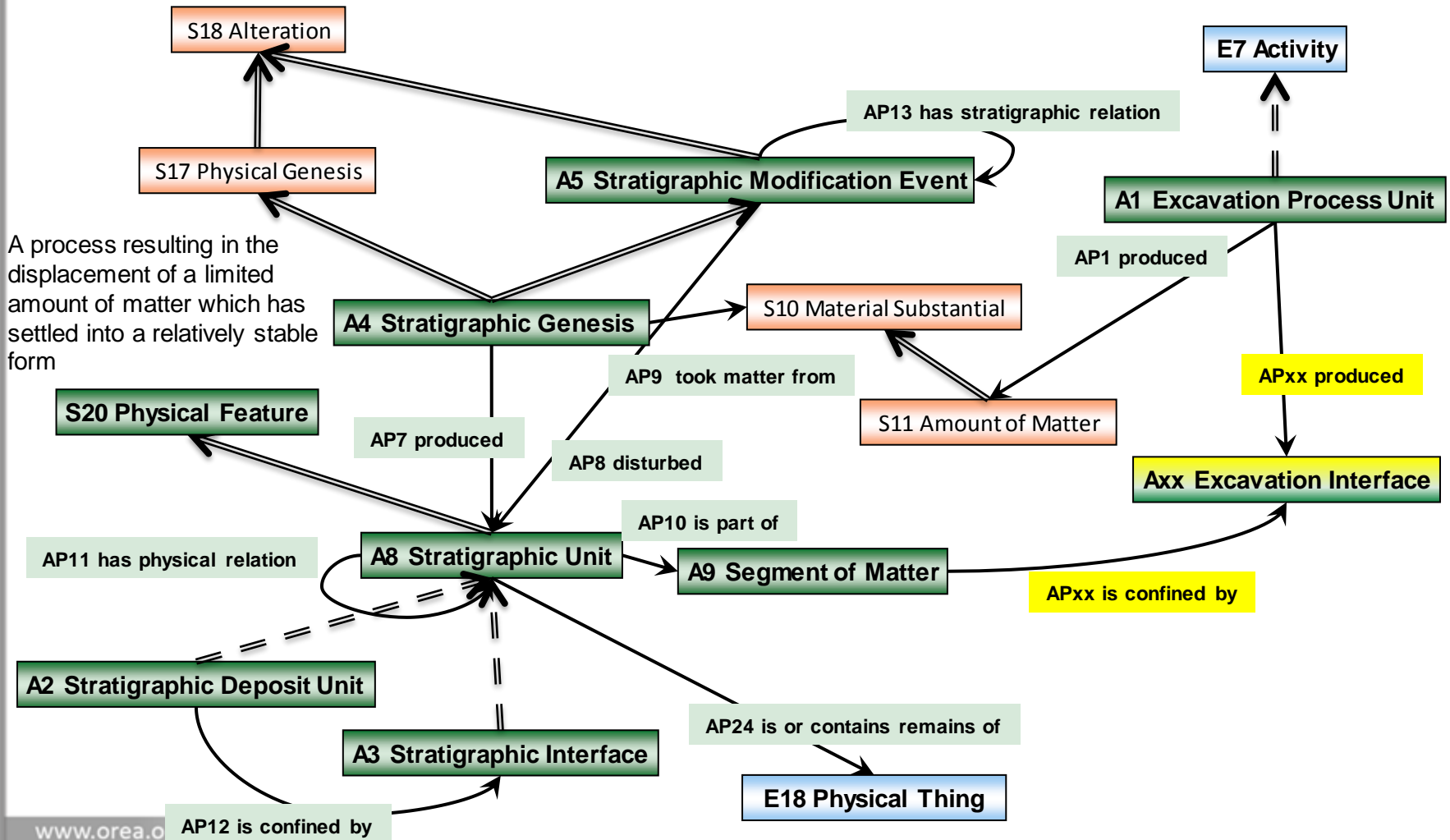
CIDOC CRM & Extensions

Excavation obj. – archaeological obj.

CRMscience &
CRMarchaeo



Stratigraphic Genesis and Excavation Genesis



Thank you for your attention!



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